II. AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for modeling a behavior of an LPAR (logical partition) in a simulated computer operating in a time slice dispatch mode, comprising:

beginning a next modeling interval;

calculating a resource percentage representing a percentage of total resources allocated to the LPAR, wherein the resource percentage is equal to: 100% - a percentage of resources allocated to all other LPARs running in the simulated computer;

calculating a time slice percentage for the LPAR based on the resource percentage;

determining a CP (central processor) percentage representing a percentage of time that all physical CPs in the computer being modeled have been allocated to the LPAR; [[and]]

if the CP percentage is greater than the time slice percentage, causing the simulated computer not to dispatch CPs to the LPAR; and

outputting the behavior of the modeling.

2. (Original) The method of claim 1, including the further step of repeating each of the recited steps for a next modeling interval.

3.   (Cancelled).

4.   (Original) The method of claim 3, wherein the percentage of resources allocated to all other LPARs is based on a weighting factor specified for each LPAR, a number of logical CPs allocated to each LPAR, and a MIPs (million instructions per second) value for each LPAR.

5.   (Original) The method of claim 4, wherein the MIPs value represents a maximum consumption that each LPAR could consume in an unrestrained processor.

6.   (Original) The method of claim 1, wherein:

$$\text{time slice percentage} = \frac{(\text{resource percentage}) \times (\# \text{ of physical CPs})}{(\# \text{ of logical CPs})}.$$

7.   (Currently Amended) A tool for simulating operation of a computer having a system for modeling a behavior of an LPAR operating in a time slice dispatch mode, the modeling system comprising:

a system for calculating a resource percentage, wherein the resource percentage represents a percentage of total resources allocated to the LPAR, wherein the resource

percentage is equal to: 100% - a percentage of resources allocated to all other LPARs running in the computer simulation;

a system for calculating a time slice percentage for the LPAR based on the resource percentage;

a system for determining a CP (central processor) percentage, wherein the CP percentage represents a percentage of time that all physical CPs in the computer being modeled have been allocated to the LPAR; [[and]]

a system for determining causing the computer simulation not to dispatch CPs to the LPAR for a current modeling interval if the CP percentage is greater than the time slice percentage; and

a system for outputting the behavior of the modeling.

8.   (Cancelled).

9.   (Original) The tool of claim 8, wherein the percentage of resources allocated to all other LPARs is based on a weighting factor specified for each LPAR, a number of logical CPs allocated to each LPAR, and a MIPs (million instructions per second) value for each LPAR.

10.   (Original) The tool of claim 9, wherein the MIPs value represents a maximum consumption that each LPAR could consume in an unrestrained processor.

11.   (Original) The tool of claim 7, wherein:

time slice percentage = (resource percentage) x (# of physical CPs)

(# of logical CPs).

12.   (Currently Amended) A program product stored on a <u>computer readable</u> [[recordable]] medium for modeling a behavior of an LPAR (logical partition) in a simulated computer operating in a time slice dispatch mode, comprising:

means for calculating a resource percentage, wherein the resource percentage represents a percentage of total resources allocated to the LPAR<u>, wherein the resource percentage is equal to: 100% - a percentage of resources allocated to all other LPARs</u>;

means for calculating a time slice percentage for the LPAR based on the resource percentage;

means for determining a CP (central processor) percentage, wherein the CP percentage represents a percentage of time that all physical CPs in the computer being modeled have been allocated to the LPAR; [[and]]

means for determining causing the computer simulation not to dispatch CPs to the LPAR for a current modeling interval if the CP percentage is greater than the time slice percentage<u>; and</u>

<u>means for outputting the behavior of the modeling</u>.

13.   (Cancelled).

14.   (Original) The program product of claim 13, wherein the percentage of resources allocated to all other LPARs is based on a weighting factor specified for each LPAR, a number of logical CPs allocated to each LPAR, and a MIPs (million instructions per second) value for each LPAR.

15.   (Original) The program product of claim 12, wherein:

time slice percentage = <u>(resource percentage) x (# of physical CPs)</u>

(# of logical CPs).

16.   (Currently Amended) A method for modeling workload performance of a plurality of LPARs (logical partitions) in a computer simulation, comprising:

   providing a model for each LPAR specified in the computer simulation, wherein each model includes a defined consumption that is dependent on a consumption of the other LPARs;

   setting an initial defined consumption for each model;

   running each model and determining an observed consumption for each model;

comparing the observed consumption with the defined consumption for all of the models; and

for each model that has an observed consumption that does not agree with the defined consumption, feeding the observed consumption back to the other models;

adjusting the defined consumption of each model based on the feedback; [[and]]

iteratively repeating the running, comparing, feeding and adjusting steps until the observed consumption agrees with the defined consumption for each model; and

outputting the modeled workload performance.

17.   (Original) The method of claim 16, wherein the consumption is a measure of processor resources consumed by each LPAR.

18.   (Currently Amended) A computer simulation tool for modeling workload performance of a plurality of LPARs (logical partitions), comprising:

a system for building a model for each LPAR specified in the computer simulation, wherein each model includes a defined consumption that is dependent on a consumption of the other LPARs;

a system for running each model and determining an observed consumption for each model;

a system for comparing the observed consumption with the defined consumption for all of the models;

a system for feeding back the observed consumption to the other models from each model that has an observed consumption that does not agree with the defined consumption;

a system for adjusting the defined consumption of each model based on the observed consumption feedback; [[and]]

a system for iteratively rerunning each model until the observed consumption agrees with the defined consumption for each model; and

a system for outputting the modeled workload performance.

19.   (Currently Amended) A program product stored on a recordable medium for modeling workload performance of a plurality of LPARs (logical partitions), comprising:

means for specifying a model for each of a plurality of LPARs, wherein each model includes a defined consumption that is dependent on a consumption of the other LPARs;

means for running each model and determining an observed consumption for each model;

means for comparing the observed consumption with the defined consumption for all of the models;

means for feeding back the observed consumption to the other models from each model that has an observed consumption that does not agree with the defined consumption;

means for adjusting the defined consumption of each model based on the observed consumption feedback; [[and]]

means for iteratively rerunning each model until the observed consumption agrees with the defined consumption for each model; and

means for outputting the modeled workload performance.

20.　(Currently Amended)　A computer simulation tool for modeling LPAR behavior, comprising:

a first algorithm for modeling the behavior of an LPAR (logical partition) operating in a time slice dispatch mode; [[and]]

a second algorithm for modeling the behavior of a plurality of LPARs; and

a means for outputting the modeled LPAR behavior.

21.　(Previously Presented)　The computer simulation tool of claim 20, wherein the first algorithm includes:

means for calculating a resource percentage, wherein the resource percentage represents a percentage of total resources allocated to the LPAR;

means for calculating a time slice percentage for the LPAR based on the resource percentage;

means for determining a CP (central processor) percentage, wherein the CP percentage represents a percentage of time that all physical CPs in a computer being modeled have been allocated to the LPAR; and

means for determining causing the computer simulation not to dispatch CPs to the LPAR for a current modeling interval if the CP percentage is greater than the time slice percentage.

22.   (Original) The computer simulation tool of claim 20, wherein the second algorithm includes:

means for specifying a model for each of a plurality of LPARs, wherein each model includes a defined consumption that is dependent on a consumption of the other LPARs;

means for running each model and determining an observed consumption for each model;

means for comparing the observed consumption with the defined consumption for all of the models;

means for feeding back the observed consumption to the other models from each model that has an observed consumption that does not agree with the defined consumption;

means for adjusting the defined consumption of each model based on the observed consumption feedback; and

means for iteratively rerunning each model until the observed consumption agrees with the defined consumption for each model.

Appl. No. 10/789,262
Reply to Final Office Action of 03/14/2007

Page 11 of 17